

Remarks

Claim Status:

Claims 2-11 are pending in the application. Claim 1 has been canceled herein without prejudice. We reserve the right to present the subject matter in one or more related applications. Claim 2 has been amended in independent form. We note that the scope of this claim has been broadened (e.g., “the payload that represents at least two position coordinates for a point or area”); thus, we fully expect that the scope of claim 2 will continue to cover a broad range of equivalent arrangements. Claim 6 has been amended to now depend from claim 2.

Allowable Subject Matter:

Applicant greatly appreciates the indication that claims 2-5 recite allowable subject matter.

Specification Amendments:

The specification has been amended to include patent and publication numbers.

Art-based Rejections:

Claims 1-9 were rejected variously over Moskowitz (U.S. Patent No. 6,205,249), Rodriguez (U.S. Patent No. 6,650,761¹) and Schipper (U.S. Patent No. 5,987,136). We respectfully traverse each of these rejections.

Canceled Claim 1

Although this rejection is now moot, since claim 1 has been canceled, we respectfully disagree with the rejection of claim 1 over Moskowitz. For example, the cited Moskowitz passage (Col. 6, lines 14-30) is not understood to teach or suggest digitally watermarking an image with a payload that represents at least two position coordinates for a point depicted within the image.

¹ The Office Action, on page 3, paragraph 4, appears to have a typo in the listed patent number. We think that the intended patent number for Rodriguez et al. is U.S. Patent No. 6,650,761, as listed on the Examiner's PTO-892.

Claim 7

Claim 7 stands rejected over the Rodriguez patent. We must respectfully traverse this rejection.

Claim 7 recites a method including digitally watermarking an image with a payload that includes first and second portions. The watermarking uses a tiled approach. Uniformly-sized patches of the image are processed in accordance with the payload. The first portion is unchanging across all of said tiles, but the second portion changes between tiles, so that position information about each tile can be determined therefrom.

The Rodriguez patent is a clever work, including many novel combinations. However, while the cited passages at Col. 6 may discuss redundantly encoding of a watermark signal, they are not understood to teach or suggest a watermark payload (e.g., plural-bits) having first and second portions, where the second portion changes across image areas so that position information about each area can be determined, in combination with the remaining claim features.

For example, please notice Col. 6, lines 52-54, where 64 bits are tiled across an object for robust coding.

But in claim 7, while the first portion remains constant (e.g., like “tiling”), the second portion changes so that position information about the various areas can be determined.

We respectfully request that claim 7 be allowed.

Claims 8 and 9

Claim 8 stands rejected over Moskowitz. We must respectfully traverse this rejection.

The cited Moskowitz passage fails to teach or suggest watermarking different regions of an image with different watermark payload data, wherein a *first region* of the image is watermarked with payload data relating to an elevation of terrain depicted in said first region, and a *second region* of the image is watermarked with payload data relating to an elevation of terrain depicted in said second region.

In fact, we see no mention at all watermarking elevation information, let alone watermarking first and second areas with different elevation information corresponding to their respective terrains.

We respectfully submit that claim 8 should be allowed.

Claim 9 is also believed to be in condition for allowance.

New Claims

Claim 10

Claim 10 is very loosely modeled after claim 7. We respectfully submit that claim 10 is patentable over the applied art. For example, the applied art is not understood to teach or suggest a method including receiving an image; and encoding the image with a digital watermark, where the digital watermark comprises a plural-bit payload that includes first and second portions, wherein multiple instances of the digital watermark are encoded in the image with the first portion remaining unchanged in each instance, but the second portion changes between instances so that position information of corresponding image areas can be determined there from.

We respectfully request that claim 10 be allowed.

Claim 11

Claim 11 is also believed patentable. For example, the applied art is not understood to teach or suggest a method to determine geo-locations of two or more areas depicted in an image, where the image comprises a digital watermark including a plural-bit payload embedded therein. The method includes: i) analyzing the image or data corresponding to the image to recover the plural-bit payload; ii) with reference to at least the plural-bit payload, determining a geo-location of a first area depicted in the image; and iii) determining a geo-location of a second area depicted in the image by a relative position of the second area to the first area or to the first geo-location.

We respectfully request that claim 11 be allowed.

Information Disclosure Statement:

An Information Disclosure Statement is filed concurrently herewith. Consideration of the information cited therein is respectfully requested.

We also understand that all of the documents and information considered in our parent application will also be considered according to, e.g., MPEP 609.

Conclusion:

The application is believed to be in condition for allowance. Nevertheless, the Examiner is respectfully invited to contact the undersigned at 503-469-4685 with any questions.

Date: March 4, 2005

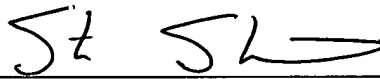
Respectfully submitted,

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